Efficacy and safety of praziquantel, tribendimidine and mebendazole in patients infected with Clonorchis sinensis

Submission date	Recruitment status No longer recruiting	[X] Prospectively register	
03/05/2011		[] Protocol	
Registration date 19/05/2011	Overall study status Completed	Statistical analysis plar	
		[X] Results	
Last Edited 16/12/2015	Condition category Infections and Infestations	[_] Individual participant c	

Plain English summary of protocol

Not provided at time of registration

Contact information

Type(s) Scientific

Contact name Miss Lili Xu

Contact details

207 Rui Jin Er Lu Shanghai China 200025

luckylilyxu@yahoo.com.cn

Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers N/A

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- n
- data

Study information

Scientific Title

Efficacy and safety of praziquantel, tribendimidine and mebendazole in patients infected with Clonorchis sinensis: a single-centre, open-label, randomised controlled study

Study objectives

Clonorchiasis is one of important food-borne trematodiases which is highly prevalent in east and southeast Asia, especially in China, Korea, northern parts of Vietnam, and the far eastern part of Russia. Chemotherapy is the mainstay for the control of food-borne trematodiasis. Currently, praziguantel is the drug of choice for clonorchiasis. According to the recommendation from World Health Organisation (WHO), the appropriate treatment schedule is 25 mg/kg thrice daily for up to 2 days which results in cure rates of 94100%. Promotion of this dose schedule of praziguantel in mass treatment of clonorchiasis may have certain difficulty, while administration of single dose or reduction of treatment course results in less or unstable efficacy. Therefore, it still needs to develop the new drugs against C. sinensis. In recent years, we found that oral administration of single-dose tribendimidine and mebendazole and multiple-dose albendazole are efficacious. Tribendimidine exhibits not only potential effect against C. sinensis but also potential effect against juvenile C. sinensis. Albendazole was reported to be effective against C. sinensis in rats, and similar results were also shown in experimentally infected dogs. Up to 2005, an experimental study indicated that albendazole and mebendazole showed a potential effect against adult C. sinensis in rats and their single complete curative dose was 150 mg/kg. We aim to assess the efficacy and safety of tribendimidine, mebendazole and albendazole compared with that of praziguantel in patients with parasitologically confirmed Clonorchis sinensis.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Ethical Review Committee of the National Institute of Parasitic Diseases, China CDC, 29/04 /2011, no. 2011042901

Study design

Single-centre open-label randomised controlled study

Primary study design Interventional

Secondary study design Randomised controlled trial

Study setting(s) Hospital

Study type(s) Treatment

Participant information sheet

Not available in web format, please use contact details below to request a patient information sheet

Health condition(s) or problem(s) studied

Clonorchiasis

Interventions

Current interventions as of 14/08/2012:

The intervention consists of four treatments, all the medicine is administered orally to each person

1. Multiple-dose praziquantel serves as control, and the total dose is 75 mg/kg (18.75mg/kg twice daily for two days consecutively).

- 2. Single-dose tribendimidine 400mg.
- 3. Two doses, on the same day, of Tribendimidine 200mg. The total dose is 400 mg.
- 4. Single-dose mebendazole 400mg.

All the participants are supervised after treatments, and are asked to report any potential drug related symptoms at 3h and 24h after each time of taking medicine.

Previous interventions until 14/08/2012:

The intervention consists of four treatments, all the medicine is administered orally to each person

1. Multiple-dose praziquantel servers as control, and the total dose is 75 mg/kg(18.75mg/kg twice daily for 2 days consecutively)

2. Single-dose tribendimidine(400mg)

3. Multiple-dose mebendazole, and the total dose is 1500mg (500mg once daily for 3 days consecutively)

4. Multiple-dose albendazole, the total dose is 3200mg(400mg twice daily for 4 consecutive days).

All the participants are supervised after treatments, and are asked to report any potential drug related symptoms at 24h, 48h, 72h, 96h, 120h and 144h after the first dose

Intervention Type

Drug

Phase Not Applicable

Drug/device/biological/vaccine name(s)

Praziquantel, tribendimidine, mebendazole, albendazole

Primary outcome measure

1. Egg reduction rate (ERR) and cure rate (CR), measured using the Kato-Katz stool examination method

2. Adverse reactions, measured using a standardised questionnaire. The intensity of adverse events was graded as mild, moderate, severe and serious

Assessed at 4 weeks after treatment

Secondary outcome measures

All the participants who are to receive the tribendimidine treatment will accept checks of blood, urine, electrocardiogram, liver function and kidney function before and after the treatment. The abnormal indexes will be supervised and recorded.

Overall study start date 25/06/2012

Completion date

15/08/2012

Eligibility

Key inclusion criteria

Current inclusion criteria as of 14/08/2012: Eligible patients are residents of Hunan province aged 15 to 65 years who have Clonorchis sinensis infections, both sexes.

Previous inclusion criteria until 14/08/2012: Eligible patients are residents of Guangdong province aged 2 years and above who had Clonorchis sinensis infections, both sexes

Participant type(s) Patient

Age group Adult

Sex Both

Target number of participants 120 participants

Key exclusion criteria

1. Pregnant or lactating women

Presence of any abnormal medical condition, such as heart disease, high blood pressure, severe malnutrition, severe liver and kidney disease, psychiatric and neurologic disorders
 Use of praziquantel, tribendimidine, albendazole and mebendazole or any anthelminthic treatment within the past month
 Encolled in any other clinical investigation during the study.

4. Enrolled in any other clinical investigation during the study

Date of first enrolment

25/06/2012

Date of final enrolment 15/08/2012

Locations

Countries of recruitment China **Study participating centre 207 Rui Jin Er Lu** Shanghai China 200025

Sponsor information

Organisation The National Institute of Parasitic Diseases (China)

Sponsor details

China CDC 207 Rui Jin Er Lu Shanghai China 200025 +86 (0)21 6437 7008 luckylilyxu@yahoo.com.cn

Sponsor type

Government

ROR https://ror.org/04wktzw65

Funder(s)

Funder type Government

Funder Name National Institute of Parasitic Diseases, China CDC (China)

Results and Publications

Publication and dissemination plan Not provided at time of registration

Intention to publish date

Individual participant data (IPD) sharing plan

IPD sharing plan summary Not provided at time of registration

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<u>Results article</u>	results	14/08/2014		Yes	No